



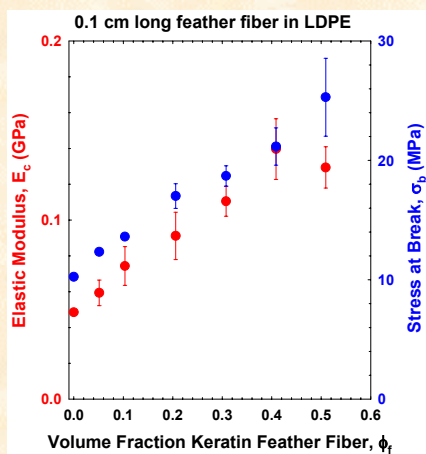
KERATIN FEATHER FIBER REINFORCED POLYMER COMPOSITES

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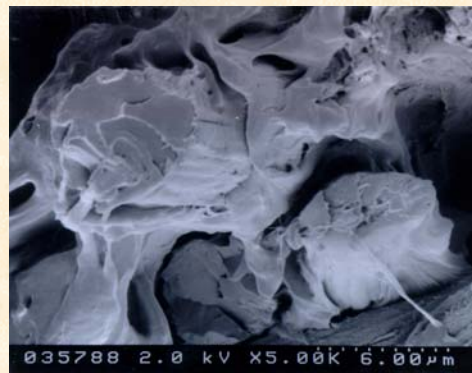
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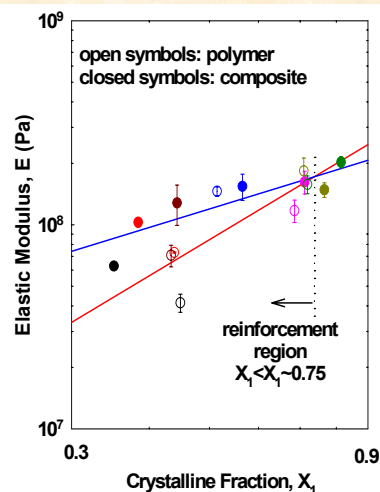
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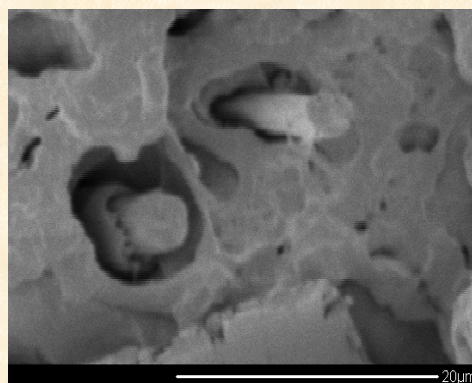
Addition of feather fiber increases properties of composite.



In LDPE, good adhesion of polymer to fiber. Fiber diameter is 5 μm .



High amounts of crystallinity interfere with polymer/fiber interactions.



In HDPE, polymer/fiber interactions are disrupted. Fiber diameter is 5 μm . Having a tailored trans-crystalline zone, i.e., using MaPE, eliminates this problem.